



United States  
Environmental Protection  
Agency

# TWIST

The Wastewater Information System Tool  
User Guide



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# I. Introduction

The TWIST database was created for local, county, and state health departments or other agencies that need an adaptable tool for tracking and managing onsite and clustered wastewater treatment systems. TWIST is designed to track information related to the facility served, permits, site evaluations, system types, services provided, and complaints (see Section V on page 22 for a complete list of data elements). It can also provide guidance to private vendors who might be developing databases with similar purposes. TWIST is a template which can be modified to meet specific needs.

TWIST is a Microsoft® Access-based data management tool. Because TWIST has a narrowly defined purpose, it does not include the whole set of functions that can be achieved by similar Microsoft® Access databases.

**Important Note:**

TWIST is not a secure database. Users concerned about security should develop secure protocols for using TWIST.

## TWIST Database System Requirements

TWIST is a customized Microsoft® Access-based database and therefore has similar hardware and software requirements as Microsoft® Access. TWIST can be operated on IBM-compatible personal computers (PCs) with a RAM of 128 MB or greater. The operating system should be Microsoft Windows® 2000 with Service Pack 3 (SP3), Windows XP, or later. The system is developed in Microsoft® Access 2003; therefore, some of the functionalities may not work on earlier versions. The operating systems should be Windows NT® or higher.

## TWIST User Guide

This document is provided as guidance for TWIST database. The User Guide is divided into two major sections, for two slightly different audiences. The first section, “Data Management,” instructs the TWIST user on entering, searching, and modifying data. This section is written for beginners who don’t need to be very familiar with Microsoft® Access.

The second major section, “Database Design,” is written for users who might want to modify the TWIST database, create new forms, or otherwise make changes to accommodate specific user needs. This section would be most applicable to the intermediate or advanced Microsoft® Access user.

The User Guide is not intended to offer instructions on using Microsoft® Access. For such guidance, the user should refer to the Helpdesk available in the software.

**Important Note:**

Questions about the TWIST database or User Manual should be directed to Rod Frederick (202.566.1197) or Robert Goo (202.566.1201) at EPA

## II. Getting Started

### Downloading the TWIST Database

The database is available on CD and the Internet at [www.epa.gov](http://www.epa.gov) and may be copied onto a local or shared folder (as C:\Twist, for example). After copying the database file, make sure that the file is NOT read-only. To verify this, go to the correct file directory and right-click on the newly copied file name. Click on **Properties**. If the **Read-Only** box at the bottom of the dialog is checked, un-check the box and click **OK**.

#### Important Note:

If making the database accessible to many users at the same time, the database must be saved in a shared network drive. Multiple users can enter data simultaneously, but only one person at a time can make database design changes to the database. See the "Database Design" section of this User Guide for more information.

To open the database, go to the correct file directory and double-click the file name. If a **Security Warning** dialog box opens with "Do you want to open this file or cancel the operation?" click **Open**. The database *Login* screen will appear (Figure 1).

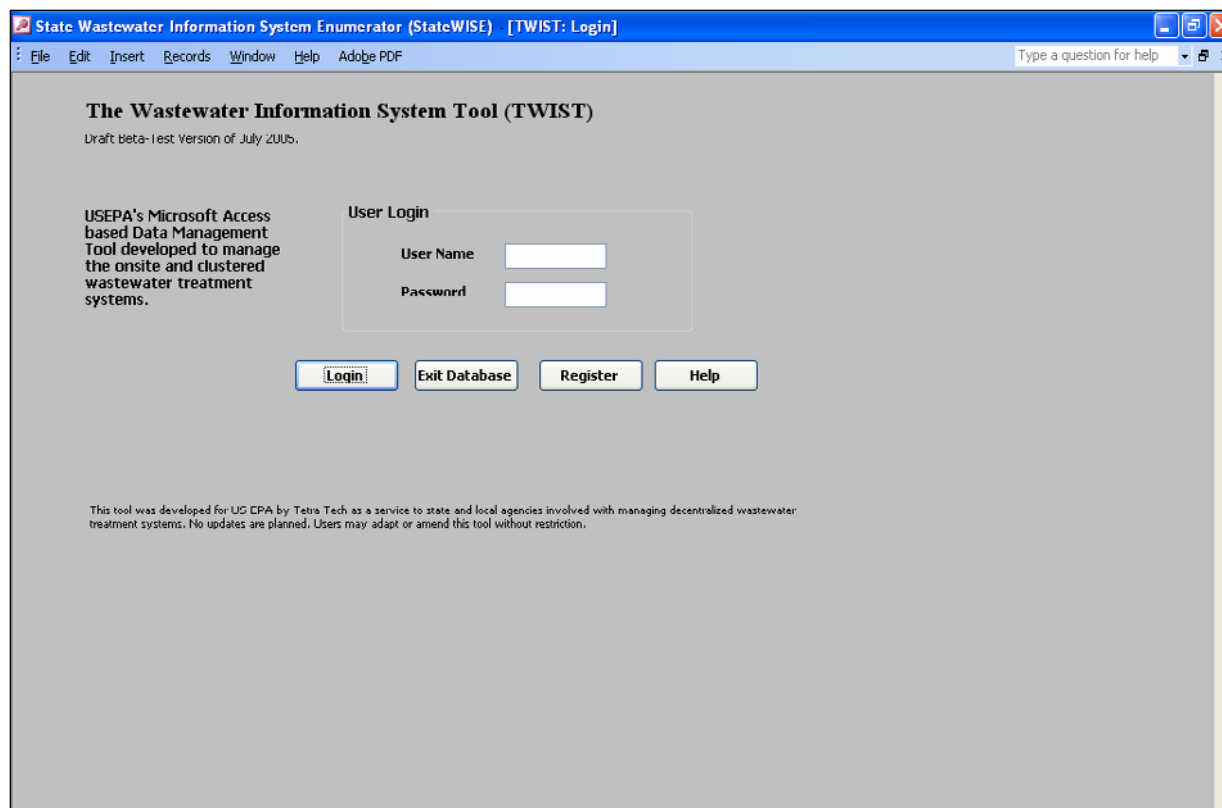


Figure 1. Database Login screen. To enter information into the database or to view stored data, a user name and password must be entered. First-time users must register before being allowed to log on.

## User Registration

To create a new user (register a new account), click the **Register** button on the database *Login* screen. Enter all the information on the user registration screen (Figure 2) and click the **Register** button. If the registration was successful, the user will be re-directed back to the database *Login* screen (Figure 1).

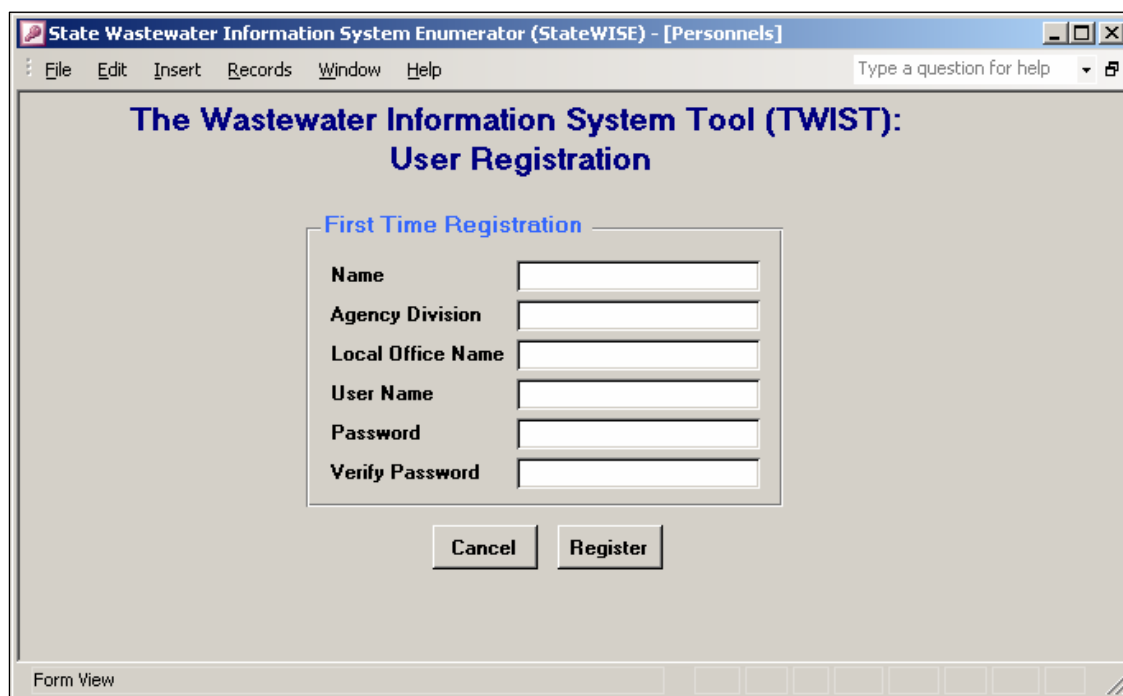


Figure 2. User Registration screen. First-time users must complete the fields on this screen before being permitted to log in to the database.

## User Login

To log in to the database, returning users and first-time users who have registered can enter their user name and password while on the database *Login* screen (Figure 1). Click the **Login** button to complete the log-in process. The TWIST *Main Form* (Figure 3) will then appear.

**State Wastewater Information System Enumerator (StateWISE) - [MainForm : Form]**

File Edit Insert Records Window Help Type a question for help

**The Wastewater Information System Tool (TWIST): Main Form**

**Current User** System User

**Agency Division** Division 1

**Local Office Name** Office 1

Enter New Site and Permit Information

Enter New Complaint

Enter New Service Information

Update Existing Data

Lookup Existing Data

Generate Report

Logout

Form View FLTR

Figure 3. TWIST Main Form. This form is the starting point for all data management activities.

### III. Data Management

After successfully logging into the system, the user can begin to enter or view data. From the *TWIST Main Form*, (Figure 3), the user can:

- enter new data;
- update existing data;
- view existing data; and
- view a sample report.

Instructions for these activities are provided later in this section.

It is important to note here that various data categories are linked together and in some cases, “dependent” upon other categories. That is, some data cannot be entered until other prerequisite data are entered first. Several of these connections are illustrated in Figure 4.

For illustrative purposes only, Figure 4 divides data into three categories: Tier 1, Tier 2 and Tier 3. Nearly all data in TWIST is dependent upon the data entered in *General Site Information*, represented by a clear box in Figure 4 and labeled TIER 1. Until data are entered in the *General Site Information* data form, data regarding permits, site details, and the wastewater treatment



system (represented by the TIER 2 *Permit Information*, *Site Evaluation Information*, and *Treatment System Information* boxes in Figure 4, respectively) cannot be entered. Likewise, TIER 3 data can be entered only after the requisite TIER 2 data are entered.

In Figure 4, the TIER 3 *Complaints* box is connected to the TIER 2 *Treatment System Information* box by a broken arrow. This shows that the *Complaints* form is connected to *Treatment System Information*, but unlike the other data, *Complaints* data can be entered without corresponding *Treatment System Information* being entered. This exception to the general rule is explained later in this section.

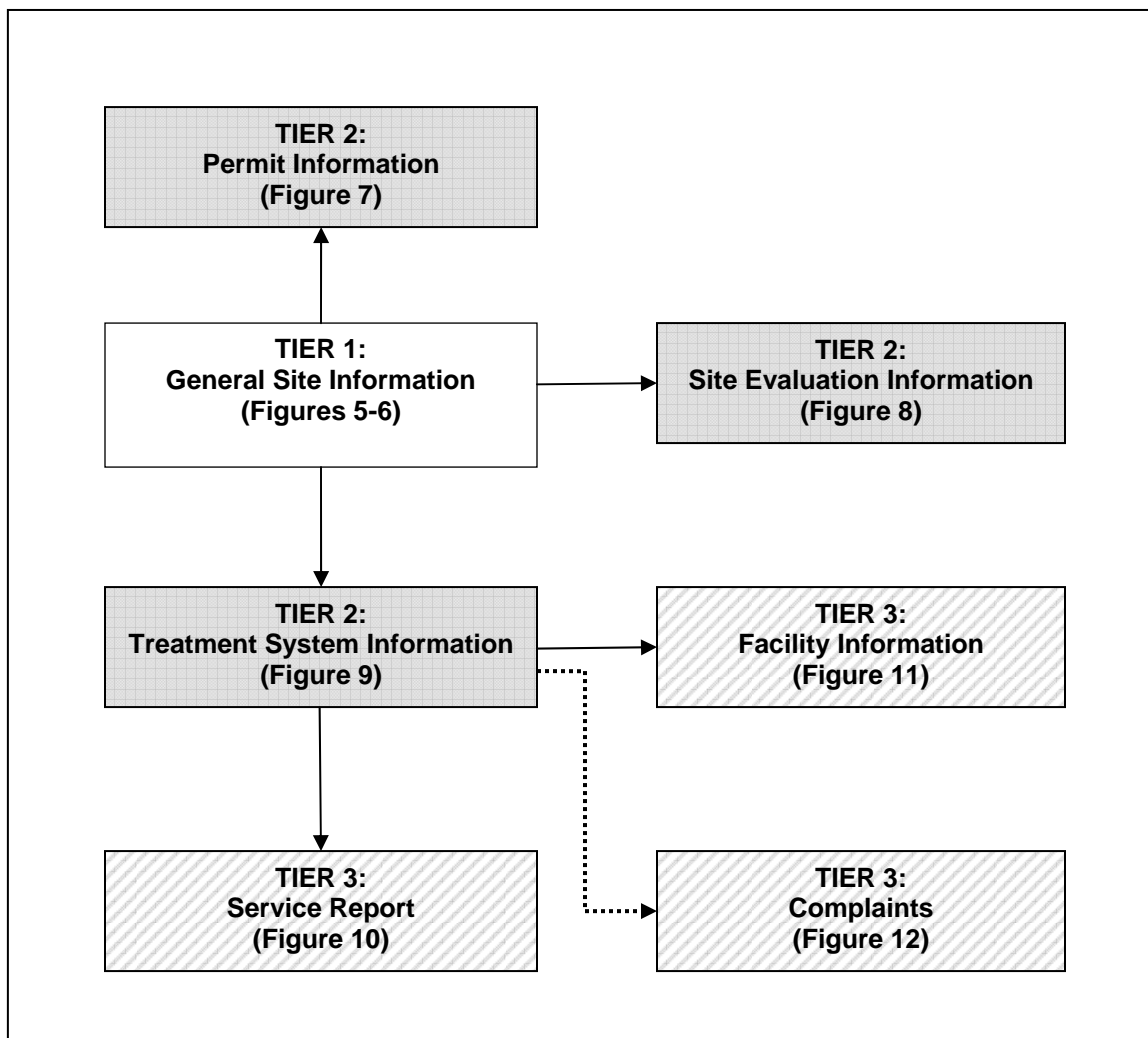


Figure 4. Relationships between various data elements in the TWIST database. TIER 3 data can be entered only after TIER 2 data, which can be entered only after TIER 1 data. An exception to this rule is the TIER 3 Complaints data, which can be entered without the TIER 2 Treatment System Information data. Boxes in this illustration also refer to figures in the User Guide showing screen shots of the various data elements.

## New Data Entry

The bottom of each data entry form shows the following set of buttons:




The function performed by these buttons, from left to right, are: navigate to the previous record, navigate to the next record, save current record, and add a new record, respectively.

The following sections explain how to enter first-time data into the TWIST database. The steps are intended as key examples illustrating the data relationships shown in Figure 4 and do not cover every data form. In addition, other than Step 1, the order of many steps can be arbitrary.

### Step 1: General Site Information

As illustrated in Figure 4, most data cannot be entered into the database until TIER 1 data is entered. To begin entering new data, click the **Enter New Site and Permit Information** button on the *TWIST Main Form* (Figure 3). This will take the user to the *General Site Information* form (Figure 5).

The *General Site Information* form contains two sets of data fields—*Ownership* (Figure 5) and *Property Information* (Figure 6). Toggle between the data field sets by clicking on the tabs near the top of the general site information form. After entering the applicable data, click the save button (  ).

#### **Important Note:**

New or edited data will only be saved by clicking on the save button **before** moving to another record or data entry form.

#### **Important Note:**

Many data forms contain a field labeled, "Apartment or Suite." To be able to save a record, this field must be completed even if the actual site address does not have an apartment or suite number. In such cases, the user should enter some place holder, such as the number "0".



State Wastewater Information System Enumerator (StateWISE) - [StateWISE: Site Information]

File Edit Insert Records Window Help Type a question for help

### The Wastewater Information System Tool (TWIST): General Site Information

Ownership Property Information

**Property Owner Details**

Select name to autofill address

Name

Apartment Or Suite

Street

City

State

Zip Code

Phone Number

Email

**System Owner Details**

☐ Same as Property Owner

Name List

Name

Apartment Or Suite

Street

City

State

Zip Code

Phone Number

Email

Permit Info

Site Evaluation

Treatment System

Return to Main Form

← → 🔍 ➡

\*Edits will only be saved by clicking the Save button

Form View

Figure 5. General site Information form showing the Ownership set of data fields. With few exceptions, data must be entered into this TIER 1 form before data can be entered into other forms.

State Wastewater Information System Enumerator (StateWISE) - [StateWISE: Site Information]

File Edit Insert Records Window Help

Type a question for help

### The Wastewater Information System Tool (TWIST): General Site Information

Ownership Property Information

**Property Details**

County	<input type="text"/>	Place Type	<input type="text"/>
Township	<input type="text"/>	Place Name	<input type="text"/>
Range	<input type="text"/>	Zoning Classification	<input type="text"/>
Section	<input type="text"/>	In Overlay Zone?	<input type="text"/>
Plat	<input type="text"/>	Overlay Zone Designation 1	<input type="text"/>
Lot Number	<input type="text"/>	Overlay Zone Designation 2	<input type="text"/>
Tax Number	<input type="text"/>	Property Control ID	<input type="text"/>
Parcel Or Lot Size	<input type="text"/>		

**Geographic Coordinates**

Latitude	<input type="text"/>	Longitude	<input type="text"/>
----------	----------------------	-----------	----------------------

Permit Info  
Site Evaluation  
Treatment System  
Return to Main Form

\*Edits will only be saved by clicking the Save button

County where the property is located

Figure 6. General Site Information form (showing the Property Information set of data fields).

## Step 2: Permit Information

As a TIER 2 data element, *Permit Information* is linked to the *General Site Information* form (Figures 5-6). Therefore, the user can enter *Permit Information* only after the *General Site Information* data is entered.

Clicking on the **Permit Info** button located on the right side of the *General Site Information* form takes the user to the *Permit Information* form (Figure 7). After entering and saving data, the user can return to the *General Site Information* form by clicking the **Back to Site** button. Alternatively, the user can return to the TWIST *Main Form* by clicking the **Return to Main Form** button.

Microsoft Access - [Permit]

File Edit View Insert Format Records Tools Window Help

Type a question for help

### The Wastewater Information System Tool (TWIST): Permit Information

Permit Details | Permittee | Operating Permit | Maintenance | Permit Violations

#### General Information

System Permit Number:

Permit Type:

Permit Issuance Date (MM/DD/YYYY):

Permit Fee:

Permit Fee Paid?:

Building Permit Fee Paid?:

Other Fee Paid?:

#### Special Permit Conditions

Variance Issued?:

Type Of Variance:

Other Conditions:

Operating Permit Needed?:

Maintenance Contractor Needed?:

Back to Site

Return to Main Form

\*Edits will only be saved by clicking the Save button

System permit number

Figure 7. Permit Information form. This TIER 2 data cannot be entered until the TIER 1 General Site Information form is completed.

### Step 3: Site Evaluation Information

Another TIER 2 data element, *Site Evaluation* is also tied to the *General Site Information* form. Hence, the user can enter *Site Evaluation* information only after the *General Site Information* is entered.

To get to the *Site Evaluation* form (Figure 8), click on the **Site Evaluation** button located on the right side of the *General Site Information* form. After entering and saving data, the user can return to the *General Site Information* form by clicking the **Return to Site Info** button. Alternatively, the user can return to the *TWIST Main Form* (Figure 3) by clicking the **Return to Main Form** button.

**The Wastewater Information System Tool (TWIST):  
Site Evaluation Information**

**Site Description**

Control ID

Date of Evaluation (MM/DD/YYYY)

Evaluator Name

Evaluator ID

Did Site Pass Evaluation?

Area System Density

**Infiltration Area Landscape Information**

Landscape Type

Landscape Position

Slope Angle (Hor to Ver)

**Soil Analysis**

Soil Analysis Type

If Other, Specify

Soil Analysis Result

Depth of Pit (for Pit/Bore Hole)

Percolation Rate (for Percolation Test)

Is Soil Compacted?

Depth To Seasonal Ground Water

Perched Ground Water?

Depth To Bedrock

Curtain Drain Needed?

Curtain Drain Installation

Available Drainfield Area

Drainfield Area Replaced?

Replaced Area

[Return to Site Info](#)

[Return to Main Form](#)

\*Edits will only be saved by clicking the Save button

Form View

Figure 8. Site Evaluation Information form. This TIER 2 data cannot be entered until the TIER 1 General Site Information form is completed.

#### Step 4: Treatment System Information

The third TIER 2 data element shown in Figure 4, *Treatment System Information*, is also tied to the *General Site Information* form.

The *Treatment System Information* form (Figure 9) is accessed by clicking the **Treatment System** button on the *General Site Information* form.

Figure 9. Treatment System Information form. This TIER 2 data cannot be entered until the TIER 1 General Site Information form is completed.

The *Treatment System Information* form has two TIER 3 data elements associate with it: *Service Report* and *Facility Information* (see Figure 4).

### *Service Report*

The *Service Report* form (Figure 10) can be accessed from the *Treatment System Information* form by clicking the **Service Reports** button. In addition, the *Service Report* form can be reached from the *TWIST Main Form* (Figure 3) by clicking the **Enter New Service Information** button.

### **Important Note:**

If accessing the Service Report form via the TWIST Main Form, the user must manually select the appropriate treatment system control ID from the pull down menu (see Figure 10). If accessing the Service Report from via the Treatment System Information form, the treatment system control ID is selected automatically.

After entering data in this form, the user can return to the *Treatment System Information* form by clicking the **Treatment System** button on the right side of the screen. Alternatively, the user can return to the *TWIST Main Form* by clicking the **Return to Main Form** button.

Figure 10. Service Report form. A TIER 3 data element, this form is connected to the TIER 2 Treatment System Information form and is also accessible from the TWIST Main Form.

### *Facility Information*

The *Facility Information* form (Figure 11) describes the structure served by the treatment system. This form can be accessed from the *Treatment System Information* form by clicking the **Facility Served** button.

After entering data in this form, the user can return to the *Treatment System Information* form by clicking the **Return to Treatment System** button on the right side of the screen. Alternatively, the user can return to the TWIST *Main Form* (Figure 3) by clicking the **Return to Main Form** button.



Figure 11. Facility Information form. A TIER 3 data element, this is connected to the TIER 2 Treatment System Information form.

#### Step 5: Complaint (Optional – Completed as Needed)

As mentioned previously in this document and illustrated in Figure 4, the data for the *Complaint* TIER 3 element can be entered even if the user does not enter related TIER 2 *Treatment System Information*. This goes against the general rule that TIER 2 data is required before TIER 3 data can be entered.

This exception is in the database because in many cases public complaints about wastewater treatment systems must be recorded before specific information about the problem treatment system is known. This allows for electronic reporting even in cases where a treatment system is not entered into the database. Thus, for information collection purposes, the *Complaint* data element is not fully dependent upon the treatment system information.

The *Complaint* form (Figure 12) is reached via the TWIST *Main Form* (Figure 3) by clicking on the **Enter New Complaint** button.

State Wastewater Information System Enumerator (StateWISE) - [TWIST: Complaint]

File Edit Insert Records Window Help Adobe PDF Type a question for help

### The Wastewater Information System Tool (TWIST): Complaint

**Treatment System Location**

Apartment or Suite

Street

City

State

Zip Code

**General Information**

Complaint Control ID

Complaint Type

Complaint Description

Return to Main Form

\*Edits will only be saved by clicking the Save button

Figure 12. Complaint form. This form is loosely connected to the Treatment System Information form, but is not fully dependent on Treatment System Information data.

## Reviewing Data

To review previously entered data, first click on the **Lookup Existing Data** button on the TWIST *Main Form* (Figure 3). This will generate a form (Figure 13) similar in appearance to the *Main Form*.

Figure 13. Edit or Lookup Existing Data window. This is accessible via the TWIST Main Form and allows the user to access and review information that has already been entered.

Clicking on the **Site Related Information** button allows the user to view previously entered data in the *General Site Information*, *Permit Information*, *Site Evaluation Information*, *Treatment System Information*, and *Facility Information* forms.

While the *Service Reports* form can be located in this manner (by navigating through the *Treatment System Information* form), it can also be accessed directly by clicking on the **Service Report Information** button in Figure 13.

**Important Note:**

When TWIST database is in Lookup Existing Data mode, users cannot modify existing data or create new records.

Finally, *Complaint* form can be reviewed by clicking on the **Complaint Information** button in Figure 13.

## Updating Data

To modify previously entered data, first click on the **Update Existing Data** button on the TWIST *Main Form* (Figure 3). This will generate a form similar in appearance to form in Figure 13.

Clicking on the **Site Related Information** button allows the user to locate and modify previously entered data in the *General Site Information*, *Permit Information*, *Site Evaluation Information*, *Treatment System Information*, and *Facility Information* forms. Accessibility to different forms is the same as mentioned in the section *New Data Entry* found previously in this User Guide.

Unlike the *Lookup Existing Data* mode, new records can be added to TWIST database while in *Update Existing Data* mode.

## Generating Data Reports

The TWIST *Main Form* contains a **Generate Report** button. Clicking this button takes the user to the window shown in Figure 14. From this window, the user can produce various data summaries. By clicking the **Site Report** button, the user can view tables containing all the data entered in the *General Site Information* form. **Site Report** is the only active button in the *Generate Report* window. The user would need to activate the other reports by modifying the database.

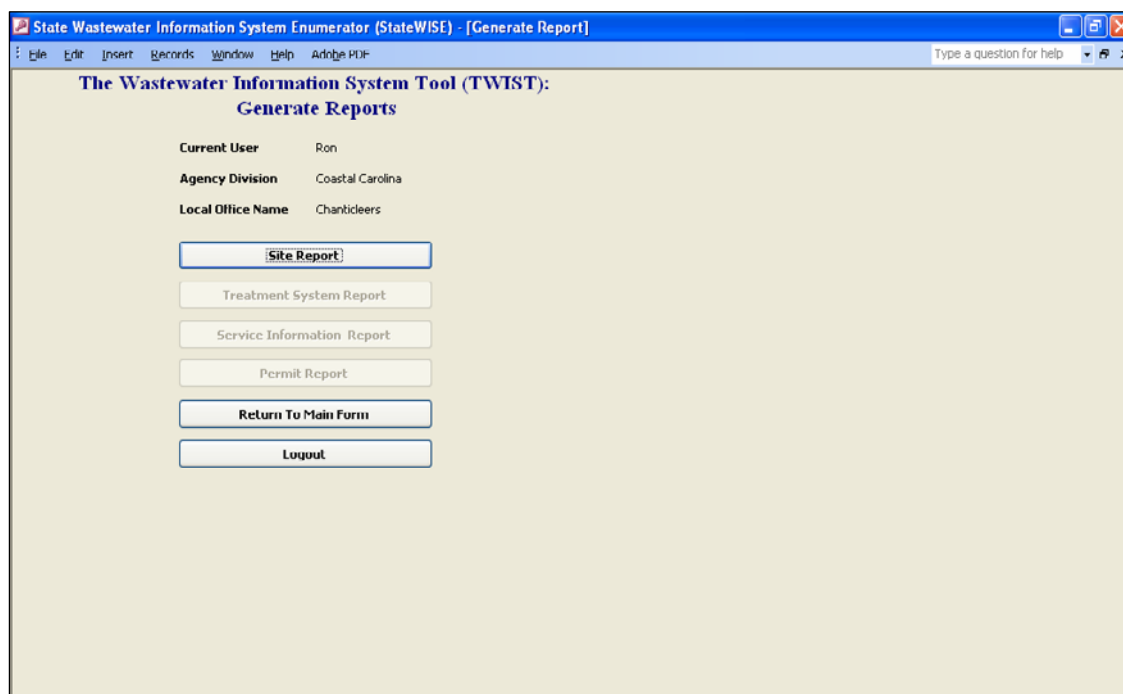


Figure 14. Generate Reports window. This is the starting point for creating reports. The TWIST user would need to modify the database to generate other reports.

## IV. Database Design

The regular menus and toolbars are disabled when the user opens the database. To be able to modify the database design or functionalities, press and hold the Shift key while opening the database. The database is in an editable mode when the screen shown in Figure 15 appears.

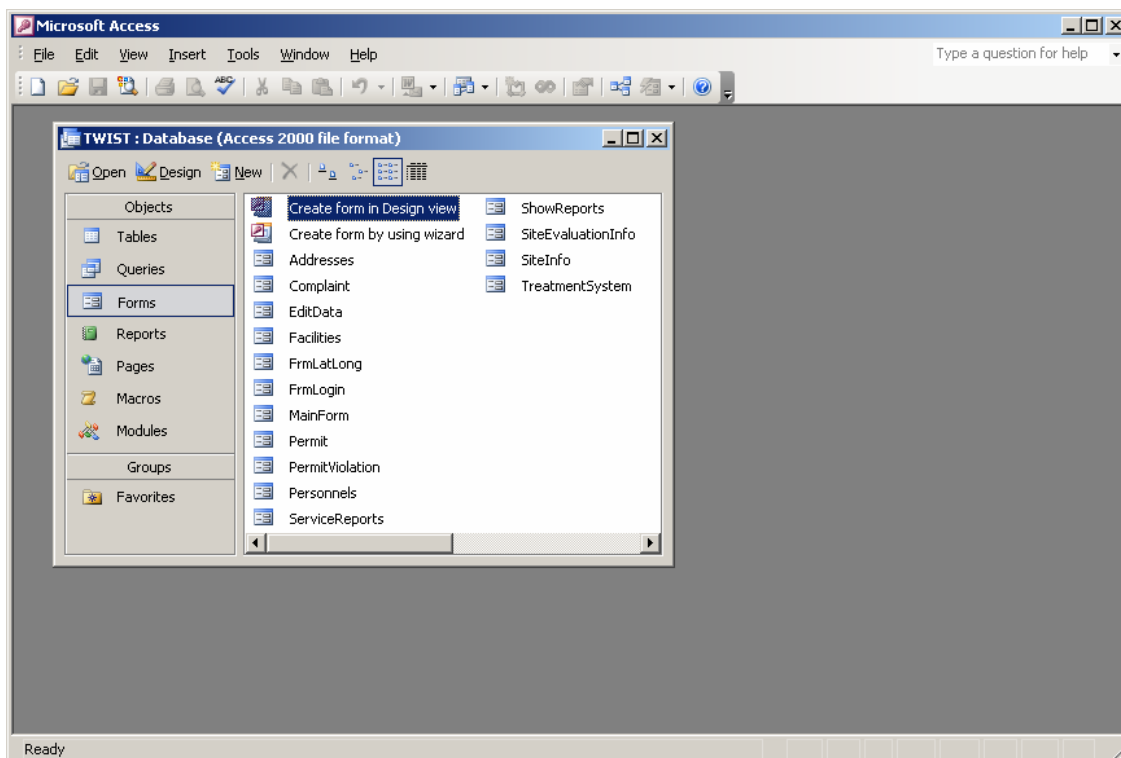


Figure 15. TWIST database window, showing the database's list of forms.

### Adding New Data Fields or Modifying Fields

With the database in the “editable” mode and the screen in Figure 15 is showing, select **Tables** in the **Objects** list.

Right-click the table to be modified and then click on **Design View**. This will open the desired table in design view.

To add a new field move below the last existing field, type the field name in the *Field Name* column and select the field data type under the *Data Type* column (Figure 16). The user can optionally insert information about the newly-added field under the *Description* column.

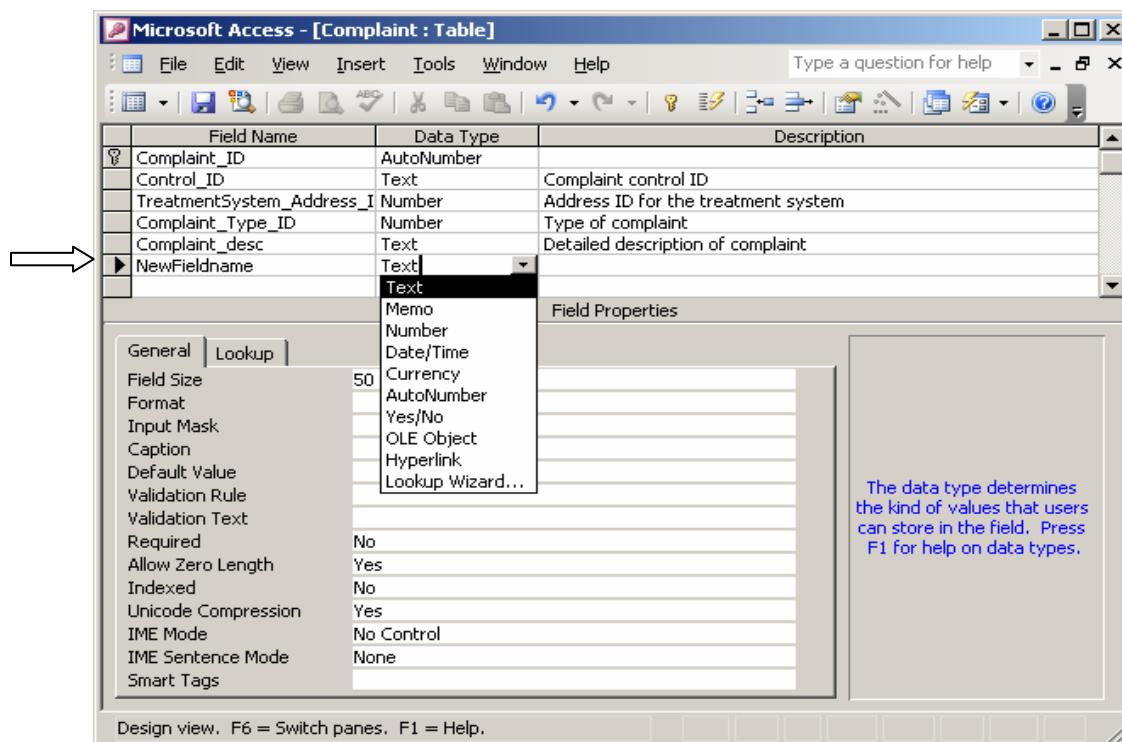


Figure 16. Dialog box for adding or modifying a data field in TWIST database.

After modifying the data field in the table, add a control (e.g., text box or combo box) in the corresponding form. While most forms in TWIST database have the same corresponding table name, there are some exceptions. Table 1 shows the names of tables and the names of their corresponding forms.

Table 1. Corresponding form and table names in TWIST database.

Form Name	Table Name
Addresses	Addresses
Complaint	Complaint
Facilities	Facilities
Permit	Permit
PermitViolation	PermitViolation
Personnels	Personnels
ServiceReports	ServiceReport
SiteEvaluationInfo	SiteEvaluationInfo
SiteInfo	Properties
TreatmentSystem	TreatmentSystem



## Enforcing User-Level Privileges

It may be necessary to specify the individuals who can access the database from a shared network. Instructions for doing this are provided in this section. To do this, click on Tools / Security / User-Level Security Wizard as shown in Figure 17.

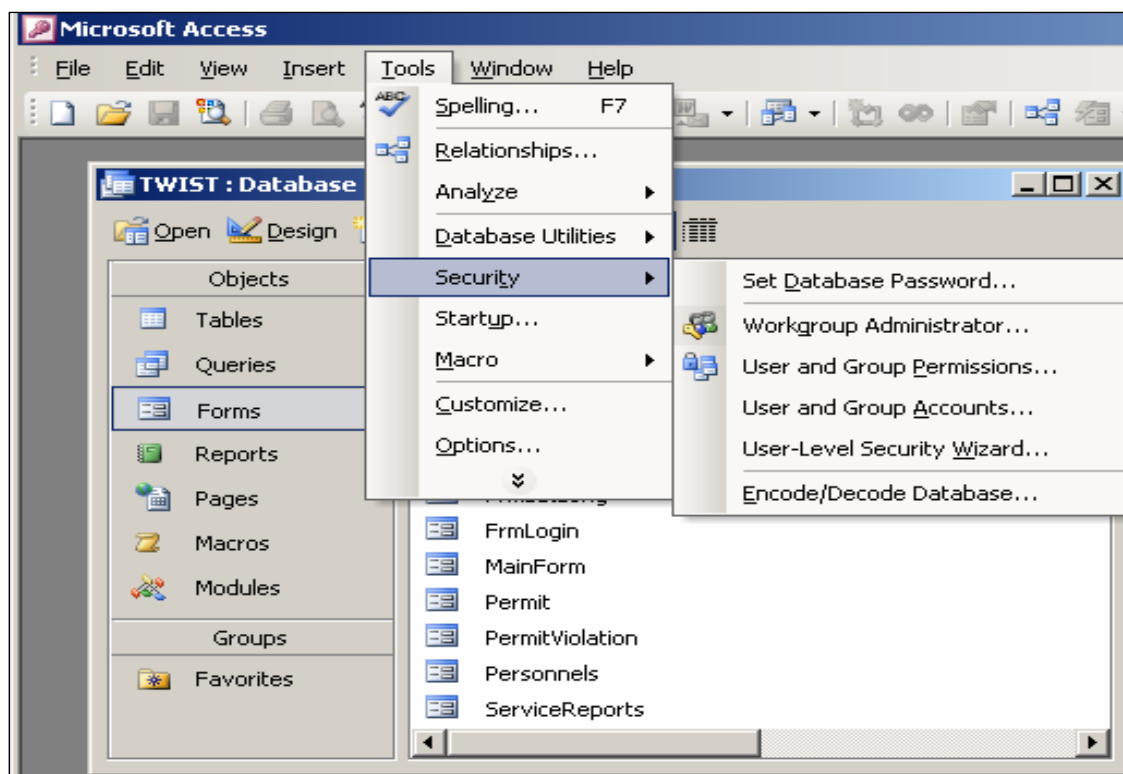


Figure 17. First step for enforcing user-level privileges.

In the window that opens, check **Create a new workgroup information file** and click **Next**. Provide the file name, optional name, and company name in the following dialog box. Make sure that **I want to create a shortcut to open my security-enhanced database** is selected and click **Next**.

In the next dialog box, select the objects (tables, queries, etc.) to which security options will be applied, and click **Next**.

Select the groups of users to include in the security file (Figure 18), and click **Next**.

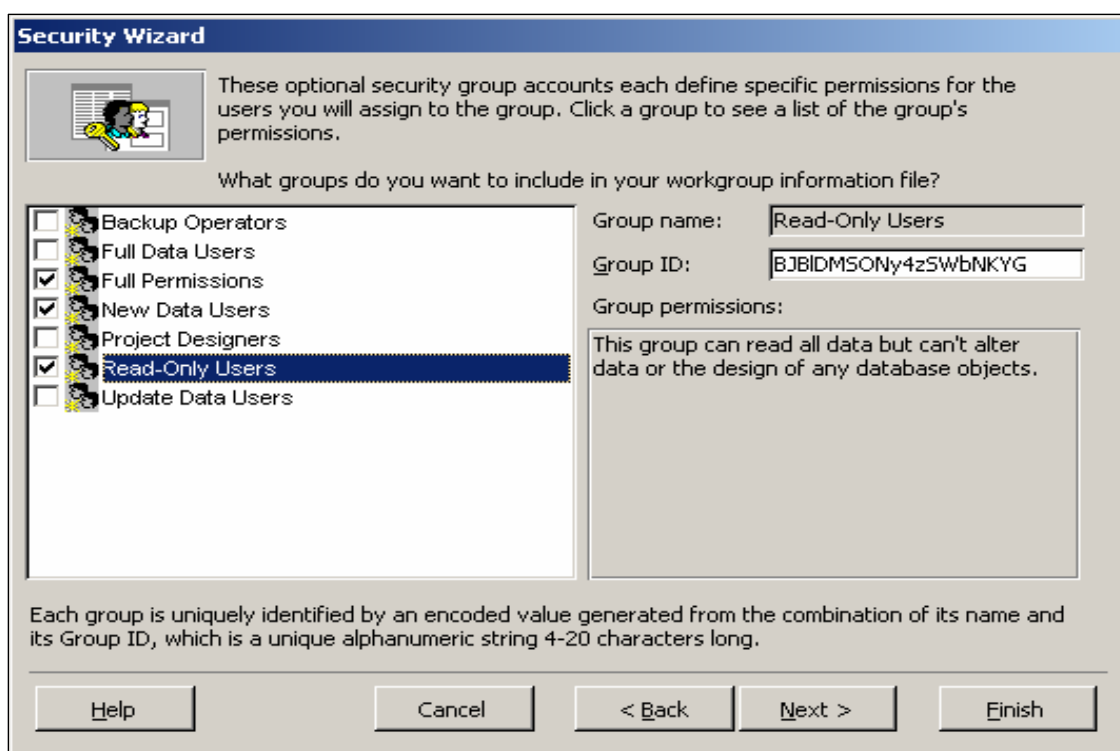


Figure 18. Selecting users to include in the security file.

In the next dialog (Figure 19), provide permissions to the user groups and click **Next**.

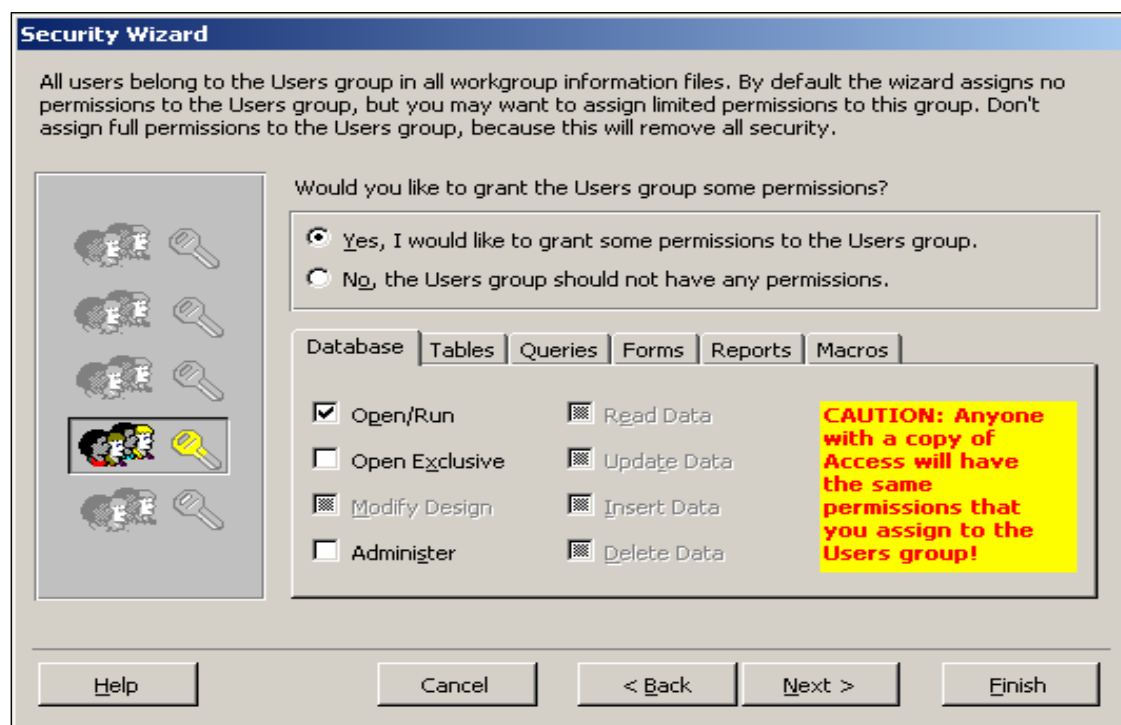


Figure 19. Providing user group permissions.

Create users in the next dialog (Figure 20). Type in the User Name and Password, then click on the **Add This User to the List** button. When finished adding users, click **Next**.

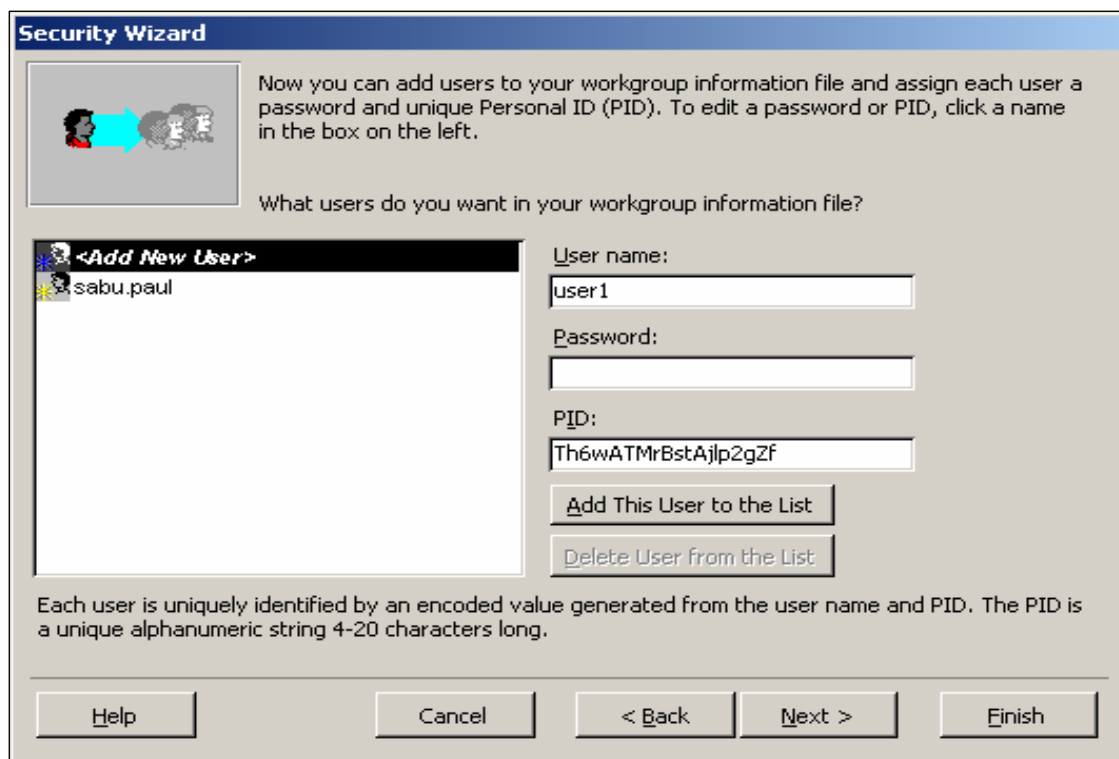


Figure 20. Dialog box for adding users.

Assign user group privileges to newly created users or assign users to different groups (Figure 21). Click **Next**.

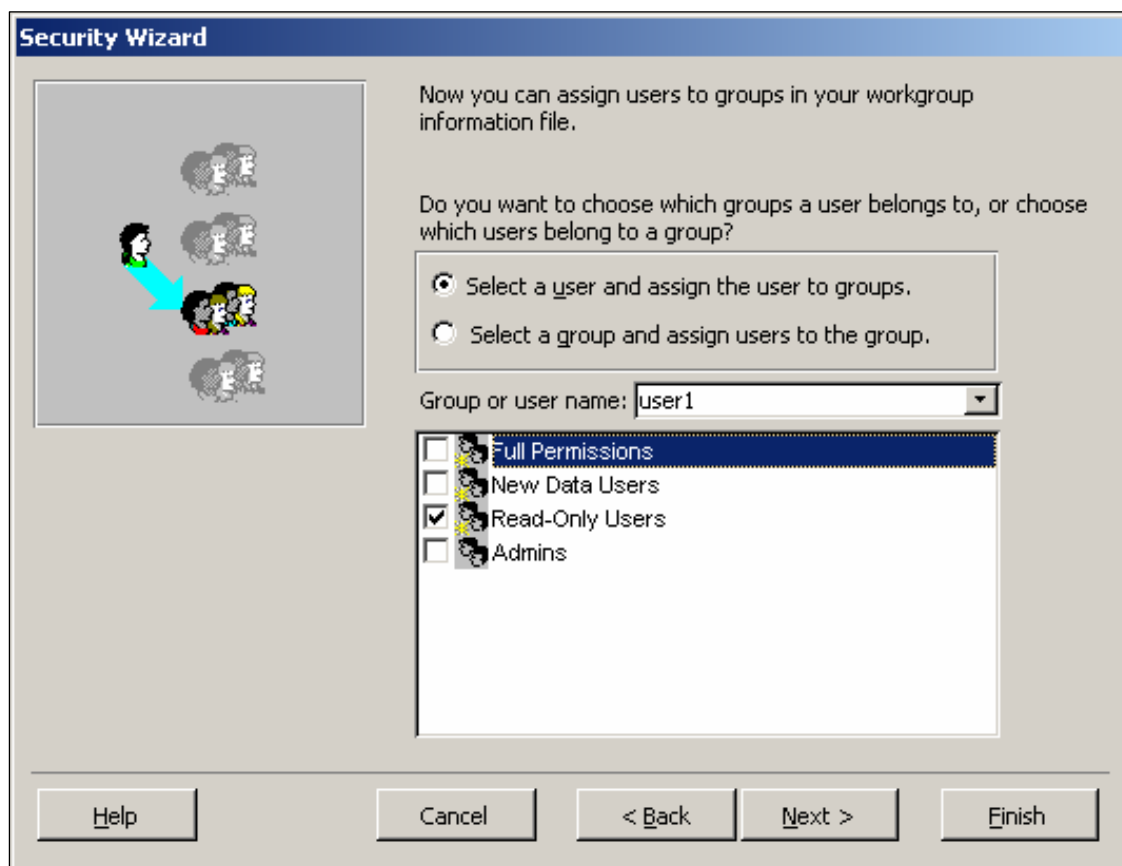


Figure 21. Assigning user group privileges.

In the next window, click **Finish**.

For more details, search the Microsoft® Access Helpdesk for “About user-level security.”

## V. List of Data Elements in TWIST

TWIST is designed as an easy-to-use tool for entering, storing, and reporting data on onsite/cluster system site locations, permits, services, and other information. The following table lists the data elements in TWIST. Users can select the data fields they wish to fill in – it is not necessary to fill in all the blanks. For example, counties in the eastern U.S. will not likely list the “range” and “section” location information, since those terms are mostly used out West.

Drop-down boxes with checkoff selections are used where small arrows appear to the right of the data field title. Text entries should be typed in where the data field box does not show a drop-down arrow. Local users should coordinate and agree on which data fields will be used, and how terms are defined locally before using TWIST. Users can adapt TWIST in any manner they choose, such as adding or deleting data fields, changing the appearance of the pages, etc. TWIST is a free-use tool developed by US EPA and Tetra Tech as a service to state, local, and tribal agencies and other users from the public and private sectors.

Data category	Data elements in TWIST	
<b>Main Form (Front Page)</b>	<u>Agency Name</u> Agency Division Local Office Name Person Entering Data Username Password	<u>Action Taken</u> Date DD/MM/YYYY Enter New Site & Permit Info Enter New Complaint Enter New Service Info Update Existing Data Lookup Existing Data Generate Report Report Type
<b>General Site Information</b>	<u>Property Owner</u> Name Apt/Suite/PO Box Street City State Zip Code Phone # Email  <u>System Owner (If Different)</u> Name Apt/Suite/PO Box Street City State Zip Code Phone #      Email	<u>Property Information</u> County Township Range Section Plat Lot # Tax Number Parcel/Lot Size In City/Village/Town Limits Y/N City/Village/Town Name (If Applicable) Zoning Classification Overlay Zone   Y/N Overlay Zone Designation 1 Overlay Zone Designation 2 Property Control/ID # Lat/Long (GPS) Coordinates:
<b>Permit Information</b>	<u>Permit Type</u> New System Installation Replacement System System Repair Holding Tank Only Other System Permit Number  <u>Permit Issued To</u> Name ID Number Apt/Suite/PO Box Street City State Zip Code Phone #      Email  <u>Permit Details</u> Date of Permit Issuance DD/MM/YYYY Permit Fee _____ Permit Fee Paid Y/N Building Permit Fee Paid Y/N Other Fee Paid Y/N Special Permit Conditions Variance Issued Y/N Type of Variance Issued (Specify): Other Conditions (Specify)	<u>Maintenance Contract Needed Y/N</u> Control or ID # Name of Maintenance Contractor Apt/Suite/PO Box Street City State Zip Code Phone Email  <u>Permit Violations</u> Date of Violation DD/MM/YYYY Permit Violation # _____ Violation Investigator Name Violation Investigator ID # Type of Violation Sewage Surfacing Discharge to Surf. Water Receiving Water Name Installed W/O Permit Operating W/O Permit Action Taken (Specify): Compliance Date DD/MM/YYYY Compliance Confirmed Y/N Fine Assessed Y/N Fine Amount Fine Paid Y/N

Operating Permit Needed Y/N

Operator Name  
ID Number  
Apt/Suite/PO Box  
Street  
City  
State  
Zip Code  
Phone #  
Email

Type of Operating Permit  
Local  
State  
NPDES  
Operating Permit #  
Date of Permit Expiration  
Permit Fee Amount  
Fee Paid Y/N  
Operating Permit Conditions  
Inspections  
Monthly/Quarterly/Annually  
Every \_\_\_\_ Years  
Pumpout  
Every \_\_\_\_ Years  
Effluent Sampling Y/N  
Monthly/Quarterly/Annually  
Groundwater Sampling Y/N  
Monthly/Quarterly/Annually

**Facility Served**

Facility Address (If Different)

Apt/Suite  
Street  
City  
State  
Zip Code

Type of Facility

Single Family Residence  
# Bedrooms  
# Baths  
Square Footage  
Multi-Family Residential  
# of Dwelling Units  
Multiple Single Family Homes  
# Homes Served  
Commercial/Public Facility  
Office Building  
Retail Store  
Restaurant  
Service Station  
Park  
Campground  
Youth/Other Camp  
RV Park Camp  
Resort  
Church  
Airport  
Bar/Tavern  
Hotel/Motel  
Laundry  
Theater  
Industrial (Sanitary Only)  
Other Facility Type (Specify) \_\_\_\_\_

Facility Information

Facility Square Footage \_\_\_\_ sq ft  
# Bathrooms  
# Sleeping Rooms  
# Employees  
# Customers/Guests  
Seasonal Use Y/N  
Months in Use MM – MM  
Special Fixtures  
In-Sink Grinder(s)  
Hot Tub(s) Drained to Treatment System  
# of Hot Tubs  
Hot Tub(s) Capacity \_\_\_\_ Gallons Total  
Water Softener  
Other (Specify)  
Approximate Year Structure(s) Built YYYY  
Rental Property Y/N  
Last Property Transfer MM/YYYY

Water Supply Source

Public Water Line  
Well  
Private  
Public  
Cistern  
Lake  
Spring  
Other (Specify): \_\_\_\_\_  
Untreated  
Treated



**Site Evaluation Information**

Site Description

Control or ID #  
 Date of Site Evaluation DD/MM/YYYY  
 Evaluator Name  
 Evaluator ID #  
 Site Passed Evaluation Y/N  
 Area System Density: #s/Acre = \_\_\_\_

Type of Soil Analysis

Backhoe Pit  
 Auger Holes  
 Depth of Pit/Bore Hole \_\_\_\_ ft  
 Percolation Test  
 \_\_\_\_ Min/Inch  
 Other (Specify)

Landscape Position – Infiltration Area

Level / Slightly Rolling  
 Top of Slope  
 Upper Slope Shoulder  
 Middle of Slope  
 Lower Slope  
 Toe of Slope  
 Floodplain  
 Slope Angle: Horiz to Ver

Soil Analysis Results

Soil Drainage Class  
 Excessively Drained  
 Somewhat Excessively Drained  
 Well Drained  
 Moderately Well Drained  
 Somewhat Poorly Drained  
 Poorly Drained  
 Very Poorly Drained  
 Soil Compacted Y/N  
 Depth to Seasonal GW \_\_\_\_ inches  
 Perched GW Table Y/N  
 Depth to Bedrock \_\_\_\_ inches  
 Curtain Drain Needed Y/N  
 Curtain Drain Installation N E S W side  
 Available Drainfield Area \_\_\_\_ sq ft  
 Drainfield Replacement Area Y/N  
 Replace Area \_\_\_\_ sq ft

**Treatment System**

Installation Information

Control or ID #  
 # of Structures Served \_\_\_\_  
 Date Installed DD/MM/YYYY  
 Installer Name  
 Apt/Suite/PO Box  
 Street  
 City  
 State  
 Zip Code  
 Phone  
 Installer Registration/License/Certification #

System Manager (If Not Homeowner)

Homeowner  
 Other Manager  
 Name of Manager  
 Apt/Suite/PO Box  
 Street  
 City  
 State  
 Zip Code  
 Phone

Wastewater Information

Design Flow \_\_\_\_ Gallons Per Day  
 Waste Strength  
 Moderate (e.g., Residential)  
 High (e.g., Some Kitchen Service)  
 Very High (e.g., Restaurant)  
 Non-Conventional Wastes (Specify)

Tanks

Grease Trap Tank # 1  
 Size \_\_\_\_ Gallons  
 Type of Material  
 Concrete  
 Plastic  
 Fiberglass  
 Metal

Grease Trap Tank # 2  
 Size \_\_\_\_ Gallons  
 Type of Material  
 Concrete  
 Plastic  
 Fiberglass  
 Metal

Septic Tank #1 Size \_\_\_\_ Gallons  
 Type or Material  
 Concrete  
 Plastic  
 Fiberglass  
 Metal  
 Manufacturer  
 Compartments: 1 or 2

Post-Tank Treatment

Soil Infiltration Only  
 Aerobic Treatment Unit  
 Wetland  
 Lagoon  
 Media Filter  
     Sand or Gravel  
     Mound Type  
     Contained in Tank/Structure  
 Textile Compartment  
 Peat Modules  
 Other Media (Specify)  
 Recirculation Y/N  
 Sequencing Batch Reactor

Soil Infiltration System

Infiltration Area \_\_\_\_ sq ft  
 Depth of Infiltration System \_\_\_\_ inches  
 Distribution System Type  
     Perforated Pipe & Aggregate  
     Leaching Chambers  
     Gravelless Pipe  
     Pipe & Plastic/Other Drain Modules  
     Pressure Drip Tubing  
     Seepage Pit  
     Spray Field  
     Evaporation Field/Trenches  
     Other (Specify)  
 # of Trenches/Lines \_\_\_\_\_  
 Total Length of Trench/Lines \_\_\_\_\_ ft  
 Observation Wells in Trenches Y/N

Surface Discharging System Y/N

Receiving Water Name \_\_\_\_\_  
 NPDES Permit # \_\_\_\_\_

Flow

Gravity Flow  
 Pumped Distribution

Septic Tank #2

Size \_\_\_\_ Gallons  
 Type of Material  
     Concrete  
     Plastic  
     Fiberglass  
     Metal  
 Manufacturer  
 Compartments: 1 or 2

Septic Tank #3 Size \_\_\_\_ Gal

Type or Material  
     Concrete  
     Plastic  
     Fiberglass  
     Metal  
 Manufacturer  
 Compartments: 1 or 2

Tank Risers Above Final Grade Y/N

Effluent Filter(s) on Tanks Y/N

Electrical/Mechanical Features

Pumps Y/N  
     # of Pumps  
 Timers Y/N  
 Float Switches Y/N  
 Siphon Y/N  
 Alarms Y/N  
     Alarm Type  
 Modem or Remote Sensor Y/N

Infiltration System Setbacks

Groundwater Well Within 200 ft Y/N  
     Distance to Well \_\_\_\_ ft  
     Well in Use Y/N  
     Depth of Well \_\_\_\_ ft  
 Distance to Stream/Lake/Wetland \_\_\_\_ ft  
 Stream/Lake/Wetland Name  
 Distance to Property Line(s) \_\_\_\_ ft  
 Distance to Structures(s) \_\_\_\_ ft

**Service  
 Reports**

Service Information

Service Date DD/MM/YYYY  
 Service Control or ID #  
 Service Provider  
     Name  
     Apt/Suite/PO Box  
     Street  
     City  
     State  
     Zip Code  
     Phone  
     Email  
     Registration/License #

Tank Pumpout

# of Tanks Pumped  
 Gallons Pumped \_\_\_\_  
 Septage Destination  
 Septage Destination ID/Control #  
 Manifest/Control #

System Repair

Control or ID #  
 Type of Repair  
     Tank Repair/Replacement  
     Pumps/Switches  
     Infiltration System  
         Rehabilitate Infiltration System  
         Replace Infiltration System  
     Other (Specify)

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<p><u>Inspection</u></p> <p>Pre-Coverup Construction Inspection</p> <p>Regular/Scheduled Inspection</p> <p>Complaint Investigation</p> <p>Complaint Received Date</p> <p>Complaint Control/ID #</p> <p>Nature of Complaint</p> <p>Sewage Surfacing</p> <p>Discharge to Water Body</p> <p>Odors</p> <p>No Installation Permit</p> <p>Installation Sediment Runoff</p> <p>Complaint Referred To (Specify)</p> <p>Components Inspected</p> <p>Tank(s) 1 2 3</p> <p>Infiltration Area(s) 1 2 3</p> <p>Float Switches</p> <p>Alarms</p> <p>Instrument Panel</p> <p>Pumps</p> <p>Other Components (Specify)</p>	<p>System In Compliance Y/N</p> <p>Repair Needed Y/N</p> <p>Tank Repair/Replacement Needed</p> <p>Infiltrat. Field Repair/Replacement Needed</p> <p>Pumps/Control Repair/Replace. Needed</p> <p>Media Filter Repair/Replacement Needed</p> <p>Complete System Replacement Needed</p> <p>Compliance Required By DD/MM/YYYY</p> <p>Compliance Achieved On DD/MM/YYY</p> <p>System to be Replaced Y/N</p> <p>New Permit # _____</p>	
<p><b>Complaint</b></p>	<p>Address</p> <p>Control or ID Number</p> <p>Complaint Type</p> <p>Complaint Description</p>	

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**Figure 2:  
TWIST Database Map**

